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Dairy Farms
Five Year Summary

1982-1986

1982-1986

NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

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FOREWORD

This report provides a summary of the business performance of Nova Scotia dairy farms over a five year period, 1982-1986 inclusive. Data used in the preparation of this summary was obtained from the Nova Scotia Dairy Farm Business Summaries prepared in each of the five years included in this report.

As noted in the Dairy Farm Business Summaries, the farms used were not selected on a random sample basis, but rather volunteered their information. Hence, care should be exercised in the interpretation and use of the results shown in this summary.

The main purpose of this summary is to provide basic information on the dairy industry, at the farm level, in Nova Scotia over a five year period. Trends in incomes, costs, net returns, efficiency and management factors are outlined.

The co-operation of the dairy producers whose business information has been used to prepare this summary is gratefully acknowledged. Thanks are also extended to Tracey Mitchell, who did the typing for this report.

The authors accept full responsibility for any errors which may appear in the final report.

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SECTION A

SUMMARY

SUMMARY

This report provides information on trends that have occured at the farm level in the Dairy Industry over the five year period, 1982-1985 inclusive. As noted earlier, the farms used to provide the basic data were not selected on a random sample basis. However, even with this noted limitation, the information contained in this summary can be used with care to provide useful trend data regarding the dairy industry in Nova Scotia.

The material is presented in the following manner - a brief summary of ratios, cost and return data, and management factors on a per farm, per cow and per hectolitre basis. The format used for presentation of information is similar to that used in the annual Dairy Farm Business Summaries.

In reviewing information contained in Table A-1, a number of observations can be made. Gross Farm Income has increased in each of the five years with an overall increase of some 26 percent over the five year period. At the same time, costs have increased 16 percent over this period. Net Farm Income has more than doubled over the five year period.

Production per cow has shown a modest increase over the five years, with the change over the period being 5.2 percent. Milk sold per man equivalent has increased by 3.7 percent over the period.

In terms of prices received from milk, this figure has also changed over the period, from an average price of $43.18 per hectolitre in 1982 to $51.59 in 1986. This represents an increase, in percentage terms, of 19 percent. While returns have been increasing, costs have been on the rise as well. The cost of producing a hectolitre of milk averaged $46.93 in 1982, while in 1986 this figure was $51.10 - for a percentage change of 9 percent. The net return to the farmer was positive in 1986 - that is, the net return was greater than the cost. In 1986, the net return was $.50 per hectolitre.

The largest individual component of cost in producing milk is purchased dairy ration. On a per cow basis, this expense

has increased from $702. in 1982 to $764. in 1986, for a change of some 9 percent. On a per hectolitre of milk sold basis, the cost of feed increased by only $.43 from $12.73 in 1982 to $13.16 in 1986.

Investment per cow has increased gradually over the period, with the increase over the five year period being 33 percent.

Return to total invested capital improved during the five year period, going from 5.1 percent in 1982 to 9.8 percent in 1986.

Capital turnover increased slightly in 1986 to 1.6.

TABLE A-1: SUMMARY

ITEM	1982	1983	1984	1985	1986
Gross Farm Income	177915	184286	205786	213631	225127
Total Farm Expenses	163422	164257	184025	186869	189725
Net Farm Income	14493	20029	21761	26762	35403
Labor & Management Income	1121	9216	9548	14002	18306
# of Cows/Farm	63	61	64	64	64
Production/Cow (L)	5518	5434	5667	5640	5807
Cows/Man Equivalent	25	23	23	23	25
Milk Sold/Man Equiv. (HL)	1391	1271	1304	1274	1442
Receipts From Milk/HL	43.18	45.21	47.41	49.83	51.59
Cost of Producing Milk/HL	46.93	46.65	48.98	50.32	51.10
Net Return/HL	-3.75	-1.44	-1.58	-0.49	.50
Variable Cost as % of Total Cost	66	66	67	67	64
Fixed Cost as % of Total Cost	20	20	20	20	21
Opportunity Cost as % of Total Cost	14	14	13	13	15
Purchased Feed/Cow ($)	702	683	770	760	764
Feed Cost/HL Milk ($)	12.73	12.57	13.59	13.48	13.16
Feed Cost as % of Milk Sold (%)	29.5	27.8	28.7	27.1	25.5
Investment/Cow ($)	4110	4506	4779	4920	5449
Return on Investment (%)	5.1	7.2	7.5	8.7	9.8
Capital Turnover (Yrs)	1.5	1.5	1.5	1.5	1.6

SECTION B

PER FARM ANALYSIS

INCOME

Total farm receipts increased from an average of $176,500. in 1982 to $221,624. in 1986, an increase of 26 percent.

Income from milk and milk subsidies accounted for 87 percent of Total Farm Receipts in 1986, up marginally from 85 percent in 1982.

TABLE B-1: INCOME

ITEM	1982	1983	1984	1985	1986
Milk Sales	143299	143727	164837	173997	186722
Milk Subsidy	6912	6081	7190	6503	6649
Livestock Sales	12793	13308	14140	15266	15193
Crop Sales	2547	2966	2808	2935	1905
Miscellaneous	10948	12797	14205	12028	11786
TOTAL FARM RECEIPTS	176500	178879	203179	210728	221624

EXPENSES

Expenses on a per farm basis increased from an average of $142,477. in 1982 to $166,261. in 1986. This represents a change of some 17 percent in Cash Expenses. Purchased dairy feed, the largest single cost item accounted for 30 percent of Cash Expenses in 1986.

TABLE B-2: EXPENSES

ITEM	1982	1983	1984	1985	1986
Dairy Feed	44272	41637	49299	48840	49169
Livestock Purchased	3296	4747	4713	4858	4150
Milk Hauling	5333	5470	6127	6069	6697
Crop Expenses	7258	10946	11765	11428	11160
Tractor & Machinery	10517	9919	11351	12541	11356
Truck & Auto	2512	3541	3116	3276	2728
Interest	13452	14363	16799	17059	17861
Labor	13012	13828	16304	17648	17019
Taxes	897	1051	1233	1231	1431
Milk Marketing Costs	7258	8476	10274	10049	11742
Dairy Supplies	3676	3801	4089	4187	4793
Vet & Drugs	1707	1884	2026	2136	2201
Breeding	1587	1913	2152	2432	2507
Building & Fence Repairs	3656	3849	4079	4034	4181
Utilities	4433	4529	5053	5506	4768
Insurance	2437	2566	2647	2672	3128
Miscellaneous	12506	12791	12347	11509	11370
TOTAL CASH EXPENSES	142477	145311	163372	165476	166261

INCOME SUMMARY

In reviewing different measures of income over the five (5) year period, it can be noted that the trend of increasing income carried through to these levels as well. Net Cash Income has increased by some 63 percent over the period from $34,025. in 1982 to $55,363. in 1986. Net Farm Income has also increased from $14,493. in 1982 to $35,403. in 1986, an increase of 144 percent.

Labor and Management Income has shown significant increases over the last five years, from $1121. in 1982 to the 1986 value of $18,306.

TABLE B-3: INCOME SUMMARY

ITEM	1982	1983	1984	1985	1986
Total Farm Receipts	176500	178879	203179	210723	221624
Total Cash Expenses	142477	145311	163372	165476	166261
NET CASH INCOME	34023	33568	39807	45251	55363
Plus: Inventory Change	1415	5407	2606	2903	3503
Less: Depreciation	20945	18946	20653	21393	23464
NET FARM INCOME	14493	20029	21761	26762	35403
Less: Value of Unpaid Family Labor	588	569	556	616	2493
Interest on Net Worth @ 10% (12% in 1982)	12784	10244	11657	12144	14604
LABOR & MANAGEMENT INCOME	1121	9216	9548	14002	18306

SECTION C

PER COW ANALYSIS

INCOME

When figures are calculated on a per cow basis, Total Farm Receipts have increased by 23 percent over the five (5) year period - from $2,800. in 1982 to $3,445. in 1986.

TABLE C-1: INCOME PER COW

ITEM	1982	1983	1984	1985	1986
Milk Sales	2273	2357	2575	2709	2893
Milk Subsidy	110	100	112	101	103
Livestock Sales	203	218	221	238	236
Crop Sales	40	49	44	46	30
Miscellaneous	174	210	222	187	183
TOTAL FARM RECEIPTS	2800	2934	3173	3281	3445

EXPENSES

Over the five (5) year period, Cash Expenses have increased from $2,260. per cow in 1982 to $2,585. in 1986 - a change of $325. per cow or some 14 percent.

TABLE C-2: EXPENSES PER COW

ITEM	1982	1983	1984	1985	1986
Dairy Feed	702	683	770	760	764
Livestock Purchased	52	78	74	76	65
Milk Hauling	85	90	96	94	104
Crop Expenses	189	180	184	178	173
Tractor & Machinery	167	163	177	195	177
Truck & Auto	40	58	49	51	42
Interest	213	236	262	266	278
Labor	206	227	255	275	265
Taxes	14	17	19	19	22
Milk Marketing Costs	115	139	160	156	183
Dairy Supplies	58	62	64	65	75
Vet & Drugs	27	31	32	33	34
Breeding	25	31	34	38	39
Building & Fence Repairs	58	63	64	63	65
Utilities	70	74	79	86	74
Insurance	39	42	41	42	49
Miscellaneous	198	210	193	179	177
TOTAL CASH EXPENSES	2260	2383	2552	2576	2585

INCOME SUMMARY

Net Cash Income on a per cow basis has increased by $321. or by 59 percent over the period. Net Farm Income has increased by $320. per cow between 1982 and 1986.

A significant increase in Labor and Management Income occured over the five (5) year period. The 1986 per cow figure shows an increase of 30 percent over the 1985 level.

TABLE C-3: INCOME SUMMARY PER COW

ITEM	1982	1983	1984	1985	1986
Total Farm Receipts	2800	2934	3173	3281	3445
Total Cash Expenses	2260	2383	2552	2576	2585
NET CASH INCOME	540	551	621	705	861
Plus: Inventory Change	22	89	41	45	54
Less: Depreciation	332	311	323	333	365
NET FARM INCOME	230	329	340	417	550
Less: Value of Unpaid Family Labor	9	9	9	10	39
Interest on Net Worth @ 10% (12% in 1982)	203	168	182	189	227
LABOR & MANAGEMENT INCOME	18	152	142	218	285

SECTION D

PER 100 LITRES ANALYSIS

INCOME

Analysis of Total Farm Receipts on a per hectolitre of milk sold basis indicates that Farm Receipts have increased by $ 8.59 per hectolitre over the period. This translates to a change of 17 percent.

TABLE D-1: INCOME PER HECTOLITRE

ITEM	1982	1983	1984	1985	1986
Milk Sales	41.19	43.37	45.43	48.03	49.81
Milk Subsidy	1.99	1.84	1.98	1.80	1.78
Livestock Sales	3.68	4.02	3.90	4.21	4.07
Crop Sales	0.73	0.90	0.77	0.81	.51
Miscellaneous	3.15	3.88	3.91	3.32	3.16
TOTAL FARM RECEIPTS	50.74	53.99	55.99	58.17	59.33

EXPENSES

Cash Expenses increased by $3.55 on a per hectolitre of milk sold basis over the five (5) year period. In percentage terms, this represents a change of 9 percent.

TABLE D-2: EXPENSES PER HECTOLITRE

ITEM	1982	1983	1984	1985	1986
Dairy Feed	12.73	12.57	13.59	13.48	13.16
Livestock Purchased	0.95	1.43	1.30	1.34	1.11
Milk Hauling	1.53	1.65	1.69	1.68	1.79
Crop Expenses	3.43	3.30	3.24	3.15	2.99
Tractor & Machinery	3.02	2.99	3.13	3.46	3.04
Truck & Auto	0.72	1.07	0.86	0.90	0.73
Interest	3.87	4.33	4.63	4.71	4.78
Labor	3.74	4.17	4.49	4.87	4.56
Taxes	0.26	0.32	0.34	0.34	0.38
Milk Marketing Costs	2.09	2.56	2.83	2.77	3.14
Dairy Supplies	1.06	1.15	1.13	1.16	1.28
Vet & Drugs	0.49	0.57	0.56	0.59	0.59
Breeding	0.46	0.58	0.59	0.67	0.67
Building & Fence Repairs	1.05	1.16	1.12	1.11	1.12
Utilities	1.27	1.37	1.39	1.52	1.28
Insurance	0.70	0.77	0.73	0.74	0.84
Miscellaneous	3.60	3.86	3.40	3.18	3.04
TOTAL CASH EXPENSES	40.96	43.86	45.02	45.68	44.51

INCOME SUMMARY

An analysis of income on a per hectolitre of milk sold basis reveals Net Cash Income increased by $5.04 over the five (5) year period. Net Farm Income shows an increase of $5.31 per hectolitre over the five (5) year period.

Labor and Management Income shows a significant increase of $4.58 per hectolitre over the period.

TABLE D-3: INCOME SUMMARY PER HECTOLITRE

ITEM	1982	1983	1984	1985	1986
Total Farm Receipts	50.74	53.99	55.99	58.17	59.33
Total Cash Expenses	40.96	43.86	45.02	45.18	44.51
NET CASH INCOME	9.78	10.13	10.97	12.49	14.82
Plus: Inventory Change	0.41	1.63	0.72	0.80	0.94
Less: Depreciation	6.02	5.72	5.69	5.91	6.28
NET FARM INCOME	4.17	6.05	6.00	7.39	9.48
Less: Value of Unpaid Family Labor	0.17	0.17	0.15	0.17	0.67
Interest on Net Worth @ 10% (12% in 1982)	3.68	3.09	3.21	3.35	3.91
LABOR & MANAGEMNT INCOME	0.32	2.79	2.64	3.87	4.90